

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: SORKIN; Feliz L.

SERIAL NO.: 10/688,184

ART UNIT: 3635

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EXAMINER: Dreidame, H.M.

TITLE: CONSTRUCTION CHAIR FOR USE WITH TILT WALL CONSTRUCTION

Amendment B: REMARKS

Upon entry of the present amendments, previous Claims 21 - 37 have been canceled and new Claims 38 - 49 substituted therefor. Reconsideration of the rejections, in light of the forgoing amendments and present remarks, is respectfully requested. The present amendments have been entered for the purpose of distinguishing the present invention from the prior art.

In the Office Action, it was indicated that Claims 21, 22, 25 - 32 and 34 - 37 were rejected under 35 U.S.C. § 102(b) as anticipated by the Sorkin '095 patent. Claims 23, 24 and 32 were rejected under 35 U.S.C. § 103(a) as being obvious over the Sorkin '095 patent.

As an overview to the present reply, Applicant has amended the independent claims herein to reflect the important distinguishing features from the prior art. In particular, new independent Claim 38 incorporates the limitations of previous independent Claim 21, along with the limitations of dependent Claims 23 and 24. In particular, new independent Claim 38 recites that the second portion extends “only vertically downwardly or inwardly” from the end of the first portion. It is further indicated that the first portion has an inner side and an outer side which “converge toward the end of the first portion”. Additionally, it is indicated that the second portion has “an inner side and an outer side tapering so as to converge at said flat bottom surface”. Independent Claim 46 incorporates the limitations of previous independent Claim 31, along with the limitations of

dependent Claims 32 and 33. In particular, it is now indicated also that the second portion extends “only vertically downwardly and inwardly” from the end of the first portion. Additionally, similar to previous independent Claim 38, it is indicated that the first portion has an inner side and an outer side that “converge toward the end of the first portion”. Additionally, and similar to independent Claim 38, it is further indicated that the second portion has an inner side and an outer side that “converge toward the flat bottom surface”. Independent Claim 48 incorporates the limitations of previous independent Claim 35, along with the limitations of dependent Claim 36. Independent Claim 48 specifically recites that the second portion extends “only vertically downwardly or inwardly” from the end of the first portion. Independent Claim 48 also recites that there is only “a single pin member” the extends vertically downwardly from the flat bottom surface. Applicant respectfully contends that these features serve to distinguish the present invention from the prior art.

The importance of such a structure was indicated in paragraph [0011] of the original specification as follows:

A particular problem associated with the use of such plastic chairs in tilt-up construction is the difference in coefficient of expansion of plastic as opposed to concrete. This is particularly the case when the separate chairs are sprayed with bond breaker compounds prior to the placement of the concrete upon the chairs. Bond breaker compounds are intended to break the seal that can be established between the form boards and concrete used for the formation of the wall. Often, the chairs are sprayed at the same time that the form is sprayed with the bond breaker. As a result, the chair will not adequately adhere directly to the concrete within the structure. Since plastic has a coefficient of expansion greater than the coefficient of expansion of the concrete, heat will tend to cause the plastic to expand for a greater distance than the concrete. As a result, the plastic chairs can expand so as to protrude outwardly of the wall subsequent to installation. This is particularly the case when the

plastic chair has been coated with a bond breaker compound. As such, a need has developed so as to minimize the expansion of the chair relative to the concrete structure.

Under the “objects” of the present invention, it is stated in paragraph [0021] and [0022] that:

It is a further object of the present invention to provide a chair for use in tilt wall construction which minimizes the adverse effects of thermal expansion upon the chair.

It is still a further object of the present invention to provide a chair which resist the adverse effect of the application of bond breaker to the chair.

In order to achieve these advantages, it is important to the structure of the present invention that the inner and outer sides of the first portion and the inner and outer sides of the second portion converge in a desired manner. As was stated in paragraph [0034] of the original specification:

In normal use, it can be seen that the first portion 22 has a substantially greater length than the second portion 24. Additionally, although the first portion 22 extends outwardly, the second portion 24 extends either vertically downwardly or inwardly. As a result, when the chair 10 is placed into the concrete, and after the concrete has solidified, any expansion effects will tend to cause the abutment of surfaces 32 of each of the legs 14, 16, 18 and 20 to abut the solidified concrete and to urge the expansion effects of the legs to be greatly absorbed by the extended length of the first portion 22. As a result, the receiving area 12 will tend to rise or lower within the concrete as a result of expansion effects. The pins 28 on the flat bottom surface 30 of the smaller second portion 24 will strongly resist the expansion forces or expand relatively minimally, as a result of the short length of such second portion.

Importantly, since the first portion has sides which converge toward the end of the first portion opposite the receiving area, the expansion effects will tend to cause the first portion “glide” through the concrete so as to move the receiving area more deeply into the concrete than, in contrast, expanding so as to push the pin members outwardly of the concrete. A similar effect is caused by the converging inner and outer sides of the second portion. Once again, when heat is applied, the

coefficient of expansion will cause the second portion to glide in a direction toward the receiving area rather than to move the pin members outwardly of the concrete. As can be imagined, when thermal expansion occurs, the plastic will tend to move in the direction of least resistance. Since the tapered sides converge toward the end of the first portion and toward the flat bottom surface, any thermal expansion will move the plastic material of the chair into the direction of divergence. Since concrete encapsulates the sides of each of the legs of the chair of the present invention, the concrete will resist thermal expansion in the direction of the converging of the sides of each of the legs. As such, the sides of each of the legs, by virtue their “converging” nature, will enhance the resistance of the chair of the present invention to the effects of thermal expansion.

Relative to the prior art, independent Claim 38 emphasizes that the second portion extends “only” vertically downwardly or inwardly from the end of the first portion. As such, this is distinguishable from the feet associated with the prior art Sorkin ‘095 patent since the feet extend outwardly of the first portion. In the Sorkin ‘095 patent, it can be seen that the first portion of each of the legs has sides which extend generally parallel to each other. As such, the inner side and the outer side of the first portion of each of the legs does not “converge” toward the second portion. Similarly, the second portion, indicated by the feet in the Sorkin ‘095 patent, tend to “diverge” toward the flat bottom surface rather than to “converge”. On this basis, Applicant contends that independent Claim 38 is patentably distinguishable from the prior art Sorkin ‘095 patent. Similarly, independent Claim 46 includes the limitations which further serve to distinguish the present invention from the particular Sorkin ‘095 patent. Independent Claim 46 also recites that the second portion extends “only vertically downwardly or inwardly” from the end of the first portion. Independent Claim 46 further recites that the inner and outer sides of the first portion converge

toward the second portion. Additionally, the inner and outer sides of the second sides of the second portion are recited as “converging toward the flat bottom surface”.

Independent Claim 48 includes the limitation that the second portion extends “only vertically downwardly or inwardly” from the end of the first portion. Independent Claim 48 is also distinguishable from the Sorkin patent in that there is only a “single pin member” extending vertically downwardly from the flat bottom surface of the second portion. The prior art Sorkin ‘095 patent shows a plurality of such pin members. On this bases, Applicant contends that independent Claim 48 is distinguishable from the prior art Sorkin ‘095 patent.

Dependent Claim 39 herein corresponds to the limitations of previous dependent Claim 22. Dependent Claims 40 - 45 correspond, respectively, to the limitations of previous dependent Claims 25 - 30. Dependent Claim 47 corresponds to the limitations of previous dependent Claim 34. Dependent Claim 49 corresponds to the limitations of previous dependent Claim 37.

Based upon the foregoing analysis, Applicant contends that independent Claims 38, 46 and 48 are now in proper condition for allowance. Additionally, those claims which are dependent upon these independent claims should also be in condition for allowance. Reconsideration of the rejections and allowance of the claims at an early date is earnestly solicited. Since no new claims have been added above those originally paid for, no additional fee is required.

Respectfully submitted,

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/Andrew W. Chu/

Date

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